

Working in groups, you are going to make a parachute using a selection of materials from the equipment provided. Each group will then test its parachute in front of the rest of the class.

## Equipment

- materials for the parachute:
  - polythene, tissue paper, nylon fabric
- thin string or thread
- scissors
- hole punch
- Plasticine or small weights

## Planning

- 1 Design a parachute. It must fall gently to the ground when released so that your 'parachutist' is unharmed. You should consider
  - its shape and size
  - the best material to use
  - how to construct it
  - how to represent the parachutist.
- 2 Draw up a detailed plan of your proposed parachute.

## Constructing

- 3 Make your parachute using the materials provided. You may wish to test your parachute and then modify your design as you work, but make sure you amend your written plan too. Your teacher will tell you how long you have to complete your model.

## Testing

- 4 Launch your parachute for testing when told to do so by your teacher.
- 5 The winning parachute is the one that takes longest to fall.

## Evaluating

- ① Use your knowledge of physics to explain the shape and size you chose for your parachute.
- ② What properties did you look for when selecting a suitable material for the parachute?
- ③ Explain why a parachute allows a person to fall to the ground safely.
- ④ What improvements would you make to your design if you were going to construct another parachute?

